

ABSTRACT OF THE DISCLOSURE

A method of repositioning the pivot point of the assembly tool and using a tether assembly to limit the tool travel of the assembly tool in provide an assembly tool reduced travel envelope that only overlaps the position of the point-of-use of an in-station work-piece and does not overlap the position of the point-of-use of any out-of-station work-piece. The method includes the steps of: calculating and positioning the pivot point a horizontal offset distance from a conveyor reference point, calculating the reduced travel distance, and attaching the tether assembly to the flexible conduit of the assembly tool so as to limit the tool travel to the reduced travel distance.